

MQA-10: OPD #4 – CAS REQUEST PROCEDURES AND EXECUTION

PREREQUISITES: MQA-8

REQUIRED READING: JP 3-09.3; TO 1M-34; AFFTP 3-1 Vol 26 (ASOC & TACP Operations) Chapter 6

PURPOSE: Familiarize new ALO with Officer Professional Development briefing on CAS request procedures and execution.

Introduction - (Slide 2)

This class is an introduction to CAS request procedures, coordination considerations, and CAS control procedures in a Tactical Operations Center (TOC). The information contained in this lesson is beneficial for a new ALO as well as the Army unit Commanders, staff, and Fire Support personnel. The topics covered in this lesson are:

- ☐ CAS Requests
- ☐ TAGS – Theater Air Ground System
- ☐ Battle Rhythm for CAS
- ☐ Airspace Coordination Area (ACA)
- ☐ CAS Characteristics
- ☐ CAS Control Measures
- ☐ Conditions for Effective CAS

CAS Requests – (Slides 3 – 8)

Preplanned CAS

Preplanned CAS includes CAS sorties which make the Air Tasking Order/Integrated Tasking Order (ATO/ITO); the aircraft flying the missions are scheduled for a particular time or time period. **These requests are made through Army channels and are generally the responsibility of, and approved/disapproved by, the S3/G3**

Scheduled CAS: Puts the CAS assets overhead the point on the battlefield where they are needed most, at a preplanned time.

On-call CAS: Puts the aircraft on ground-based or airborne alert during a preplanned time period when the need for CAS is likely, but not guaranteed (next slide).

The ALO or the ALOs CAS planning personnel gathers preplanned CAS. The ALO then gives CAS information to the S3-Air who will in turn fill out the DD Form 1972's. When the S3-Air completes the documents, he must send the completed 1972's through Army channels to Division G3-Air. To find out whether the requests are approved, the S3-Air must query the Division G3 about the section 2 or 3 of the 1972's. The S3-Air must retrieve the Air Tasking Order (ATO) and the Special Instructions (SPINS) from the Division G3 as well. An example of how to fill out the documents is as follows (next slide):

Filling out a DD Form 1972: This is where the lion's share of work is done at an ASOC. The DD Form 1972 (Joint Tactical Air Strike Request) is where you get the information from the TACP and what you use to transmit it back to him on.

| JOINT TACTICAL AIR STRIKE REQUEST | | | See Joint Pub 3-09.3 for preparation instructions. | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------|----------------------------------------------------|---------------------|
| SECTION I - MISSION REQUEST | | | | DATE |
| 1. UNIT CALLED | THIS IS | REQUEST NUMBER | SENT | |
| | | | TIME | BY |
| 2. PREPLANNED: <input type="checkbox"/> A PRECEDENCE _____ | | | RECEIVED | |
| IMMEDIATE: <input type="checkbox"/> C PRIORITY _____ | | | TIME | BY |
| 3. TARGET IS / NUMBER OF <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> A PERS IN OPEN _____ <input type="checkbox"/> E AAA ADA _____ <input type="checkbox"/> I BLDGS _____ <input type="checkbox"/> M CENTER (CP, COM) _____ <input type="checkbox"/> Q REMARKS _____ </div> <div style="width: 50%;"> <input type="checkbox"/> B PERS DUG IN _____ <input type="checkbox"/> F RKTS MISSILE _____ <input type="checkbox"/> J BRIDGES _____ <input type="checkbox"/> N AREA _____ </div> <div style="width: 50%;"> <input type="checkbox"/> C WPNS/MG/RR/AT _____ <input type="checkbox"/> G ARMOR _____ <input type="checkbox"/> K PILLBOX, BUNKERS _____ <input type="checkbox"/> O ROUTE _____ </div> <div style="width: 50%;"> <input type="checkbox"/> D MORTARS/ARTY _____ <input type="checkbox"/> H VEHICLES _____ <input type="checkbox"/> L SUPPLIES, EQUIP _____ <input type="checkbox"/> P MOVING N E S W _____ </div> </div> | | | | |
| 4. TARGET LOCATION IS <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> A _____ (COORDINATES) <input type="checkbox"/> E TGT ELEV _____ </div> <div style="width: 50%;"> <input type="checkbox"/> B _____ (COORDINATES) <input type="checkbox"/> F SHEET NO. _____ </div> <div style="width: 50%;"> <input type="checkbox"/> C _____ (COORDINATES) <input type="checkbox"/> G SERIES _____ </div> <div style="width: 50%;"> <input type="checkbox"/> D _____ (COORDINATES) <input type="checkbox"/> H CHART NO. _____ </div> </div> | | | | CHECKED BY _____ |
| 5. TARGET TIME / DATE <input type="checkbox"/> A ASAP _____ <input type="checkbox"/> B NLT _____ <input type="checkbox"/> C AT _____ <input type="checkbox"/> D TO _____ | | | | |
| 6. DESIRED ORD / RESULTS <input type="checkbox"/> B DESTROY _____ <input type="checkbox"/> C NEUTRALIZE _____ <input type="checkbox"/> D HARASS / INTERDICT _____ | | | | |
| 7. FINAL CONTROL <input type="checkbox"/> A FAC / RABFAC _____ <input type="checkbox"/> B CALL SIGN _____ <input type="checkbox"/> C FREQ _____ <input type="checkbox"/> D CONT PT _____ | | | | |
| 8. REMARKS <div style="display: flex;"> <div style="width: 50%;"> 1. IP _____ 2. HDNG _____ MAG _____ OFFSET: L/R _____ 3. DISTANCE _____ 4. TGT ELEVATION _____ FEET MSL 5. TGT DESCRIPTION _____ 6. TGT LOCATION _____ 7. MARK TYPE _____ CODE _____ 8. FRIENDLIES _____ </div> <div style="width: 50%;"> 9. EGRESS _____ 10. BCN-TGT _____ MAG _____ BCN/GRID _____ 11. BCN-TGT _____ METERS _____ TGT/GRID _____ 12. BCN ELEVATION _____ FEET MSL </div> </div> | | | | |

Line 1 of Section I is easy to fill out. Simply put down what you hear on the radio. For example, “Conical, this is Icebox 23 with an immediate. Request number 3Y002.” In the first box, you would write “Conical.” In the second box, write “Icebox 23.” In the third box, put “3Y002.”

Now you are ready to fill out **Line 2**. First, check the “Received” box and fill in the time and your initials. Also, remember to write in the date in the box for it. If the requester states in the initial transmission that this is an immediate request, circle box C. If not, the requester will state if this is preplanned. Precedence and priority are used only for preplanned missions, as immediate missions are understood to be Priority One missions.

On **Line 3**, just fill in the items the requester tells you to circle. For example, he may say, “Line 3, circle Alpha, write 150; circle Golf, write eight tango-seven twos; circle Hotel, write six trucks.” This translates to 150 personnel in the open (Alpha), eight T-72 tanks (Golf, type given), and six trucks (Hotel, type given).

Line 4 starts out with the coordinates. If only Alpha is used, the coordinate is a point; usually center of mass. If Alpha and Bravo are used, the target is strung out in a line. Alpha, Bravo, and Charlie mean the target is an area within that triangle. If all four coordinate lines are used, the target is an area within that rectangle. Echo (target elevation) is usually given in feet. Foxtrot, Golf, and Hotel are given if the request is for reconnaissance. The target(s) given in line 4 are then checked. The plotter (usually an FDT) checks it, and then Intelligence checks it when they validate the target.

Line 5 is used to give a time frame for striking the target. For immediate targets it is generally assumed the time frame is as soon as possible (ASAP). Item Bravo is a no later than (NLT) time for preplanned missions, meaning any time up to the time given is good. Item Charlie gives a time over target (TOT) for the mission. Item Delta gives an end time for a period of preplanned support (e.g. column cover or airborne alert). Items Charlie and Delta can be

used together to further delineate the amount of time the support is required; in this case Item Charlie would be the start time. If Items Charlie and Delta are used together, Item Bravo is unnecessary.

Line 6 is the order window. Item A tells the ASOC what type of ordnance the Army Echelon Commander would like to have used on the target. Items Bravo, Charlie, and Delta give a general effect desired upon the target, i.e. destroy, neutralize, or harass/interdict.

Line 7 gives particulars about the strike. Item Alpha differentiates between the ground and airborne (if available) forward air controller (FAC). Item Bravo gives the controller's callsign. Item Charlie gives the frequency for control of the mission. Generally, this is given in a Tactical Air Direction Net (TAD) number that is standard for the ASOC and given to the TACPs and Wing Operations Centers (WOCs).

Item Foxtrot gives the FAC's desired location for the fighters' Contact Point (CP).

Line 8 is the remarks section. Anything that did not fit into the previous seven lines will be placed in this section. These items include (but are not limited to) threats, weather, position of friendlies, restrictions (e.g. no CBU), specific requests (e.g. a 4-ship of fighters), Joint Air Attack Team (JAAT) mission(s), SEAD provided, laser codes for precision guided munitions (PGMs), etc. This section includes the items that flesh out the 9-Line briefing you give to the fighters when they check in (next slide).

Section 2: Section 2 is the coordination piece. The request goes out with sections 2 & 3 blank, and returns with 2 & 3 complete. The FDO will fill this out using information provided by the G-3Air, G-2 Collection Manager (for reconnaissance missions), Army Airspace Command and Control Element (A2C2) and the Fire Support Officer. It contains: approval/disapproval notification for the mission and why; what types of fire (naval gunfire or artillery) will be used in lieu of or coordinated with the air mission; any airspace control measures in effect and their location; and any restrictive fire plans in effect.

| SECTION II - COORDINATION | | | |
|-------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------|--|
| 9. NGF | | 10. ARTY | |
| 11. AIO/G-2/G-3 | | | |
| 12. REQUEST <input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED | | 13. BY | |
| | | 14. REASON FOR DISAPPROVAL | |
| 15. AIRSPACE COORDINATION AREA <input type="checkbox"/> IS NOT IN EFFECT <input type="checkbox"/> NUMBER | | 16. IS IN EFFECT <input type="checkbox"/> (FROM TIME) <input type="checkbox"/> (TO TIME) | |
| 17. LOCATION <input type="checkbox"/> (FROM COORDINATES) <input type="checkbox"/> (TO COORDINATES) | | 18. WIDTH (METERS) | |
| | | 19. ALTITUDE / VERTEX <input type="checkbox"/> (MAXIMUM VERTEX) <input type="checkbox"/> (MINIMUM) | |

Lines 15 through 19 bear a little deeper look. These are the lines in which Airspace Coordination Areas (ACAs) are deconflicted. If an ACA is not in effect, circle Item Alpha. If there is an ACA in effect, circle Item Bravo and write in the number of the ACA. Line 16 gives the start and stop times for the ACA. Line 17 gives the start and stop coordinates for the length of the ACA's centerline. Line 18 is the width in meters of the ACA from the centerline. Line 19 is the ACA's minimum and maximum altitude.

Section 3:

| SECTION III - MISSION DATA | | | |
|--------------------------------------------|--|--------------------------------|--|
| 20. MISSION NUMBER | | 21. CALL SIGN | |
| 22. NO. AND TYPE AIRCRAFT | | 23. ORDNANCE | |
| 24. EST / ACT TAKEOFF | | 25. EST TOT | |
| 26. CONT PT (COORDS) | | 27. INITIAL CONTACT | |
| 28. FAC / FAC(A) / TAC(A) CALL SIGN / FREQ | | 29. AIRSPACE COORDINATION AREA | |
| 30. TGT DESCRIPTION | | 31. TGT COORD / ELEV | |

The last section of the DD Form 1772 is where the information for an approved mission is filled in. Start with **Line 20**, which is the mission number of the aircraft flying against the target. **Line 21** gives the TACP the callsign, while **Line 22** gives the number and type of aircraft. **Line 23** provides the ordnance of the aircraft, either given as a Standard Conventional Load (SCL) code or what the ordnance actually is (e.g. 6 x Mk20 Rockeye). **Line 24** is the time the aircraft are expected to take off or what time they actually take off. **Line 25** gives the TACP an estimated time on target. **Line 26** tells the TACP what the fighters' actual CP is. Generally this is the same as the requester's

JOINT TACTICAL AIR STRIKE REQUEST

| SECTION I - MISSION REQUEST | | | | DATE | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------|-------------|
| 1. UNIT CALLED | | THIS IS | | REQUEST NUMBER | |
| | | | | TIME | SENT BY |
| 2. PRE-PLANNED <input type="checkbox"/> A | | PRECEDENCE <input type="checkbox"/> B | | PRIORITY | |
| | | | | TIME | RECEIVED BY |
| IMMEDIATE <input type="checkbox"/> C PRIORITY | | | | | |
| TARGET IS/NUMBER OF | | | | | |
| <input type="checkbox"/> A PERS IN OPEN <input type="checkbox"/> B PERS DUG IN <input type="checkbox"/> C WPNS/MG/RR/AT <input type="checkbox"/> D MORTARS/ARTY | | | | | |
| <input type="checkbox"/> E AAA/ADA <input type="checkbox"/> F RKTS MISSLE <input type="checkbox"/> G ARMOR <input type="checkbox"/> H VEHICLES | | | | | |
| <input type="checkbox"/> I BLDG <input type="checkbox"/> J BRIDGES <input type="checkbox"/> K PILLBOX/BUNKERS <input type="checkbox"/> L SUPPLIES, EQUIPMENT | | | | | |
| <input type="checkbox"/> M CENTER (CP,COM) <input type="checkbox"/> N AREA <input type="checkbox"/> O ROUTE <input type="checkbox"/> P MOVING N E S W | | | | | |
| <input type="checkbox"/> Q REMARKS | | | | | |
| TARGET LOCATION IS | | | | | CHECKED |
| <input type="checkbox"/> A (COORDINATES) <input type="checkbox"/> B (COORDINATES) <input type="checkbox"/> C (COORDINATES) <input type="checkbox"/> D (COORDINATES) | | | | | BY |
| <input type="checkbox"/> E TGT ELEV <input type="checkbox"/> F SHEET NO. <input type="checkbox"/> G SERIES <input type="checkbox"/> H CHART NUMBER | | | | | |
| TARGET TIME/DATE | | | | | |
| <input type="checkbox"/> A ASAP <input type="checkbox"/> B NLT <input type="checkbox"/> C AT <input type="checkbox"/> D TO | | | | | |
| DESIRED ORDNANCE/RESULTS <input type="checkbox"/> A ORDNANCE | | | | | |
| <input type="checkbox"/> B DESTROY <input type="checkbox"/> C NEUTRALIZE <input type="checkbox"/> D HARASS/INTERDICT | | | | | |
| FINAL CONTROL <input type="checkbox"/> A FAC/RABFAC | | | | | |
| <input type="checkbox"/> B CALLSIGN <input type="checkbox"/> C FREQ/TAD | | | | | |
| <input type="checkbox"/> D ASRT <input type="checkbox"/> E FREQ/TAD BACKUP <input type="checkbox"/> F CONT PT/TP | | | | | |
| 8. REMARKS | | | | | |
| NOTE: XMIT ONLY LINES 1,3,4,7 LINES 5,8 AS NEEDED | | | | | |
| SECTION II - COORDINATION | | | | | |
| 9. NGF | | 10. ARTY | | 11. AIO/G-2/G-3 | |
| 14. REASON FOR DISAPPROVAL | | 15. RESTRICTIVE FIRE/AIR PLAN | | 12. REQUEST | |
| | | | | <input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED | |
| 16. IS IN EFFECT | | 17. LOCATION | | 13. BY | |
| <input type="checkbox"/> A (FROM TIME) <input type="checkbox"/> B (TO TIME) | | <input type="checkbox"/> A (FROM COORDINATES) <input type="checkbox"/> B (TO COORDINATES) | | | |
| 18. WIDTH (METERS) | | 19. ALTITUDE/VERTEX | | NOTES: | |
| | | <input type="checkbox"/> A (MAXIMUM/VERTEX) <input type="checkbox"/> B (MINIMUM) | | | |
| SECTION III - MISSION DATA | | | | | |
| 20. MISSION NUMBER | | 21. CALLSIGN | | 22. NUMBER/TYPE AIRCRAFT | |
| 23. ORDNANCE | | 24. EST/ACT TAKOFF | | 25. EST TOT | |
| | | | | 26. CONT PT/RDVS (COORD/NAVAID FIX) | |
| 27. INITIAL CONTACT | | 28. FAC/ASRT/TAC(A) CALLSIGN/ FREQ | | 29. RESTRICTIVE FIRE/AIR PLAN (SEE 18-19) | |
| | | | | 30. TGT DESCRIPTION | |
| 31. TGT COORD/ELEV | | 32. REMARKS | | | |

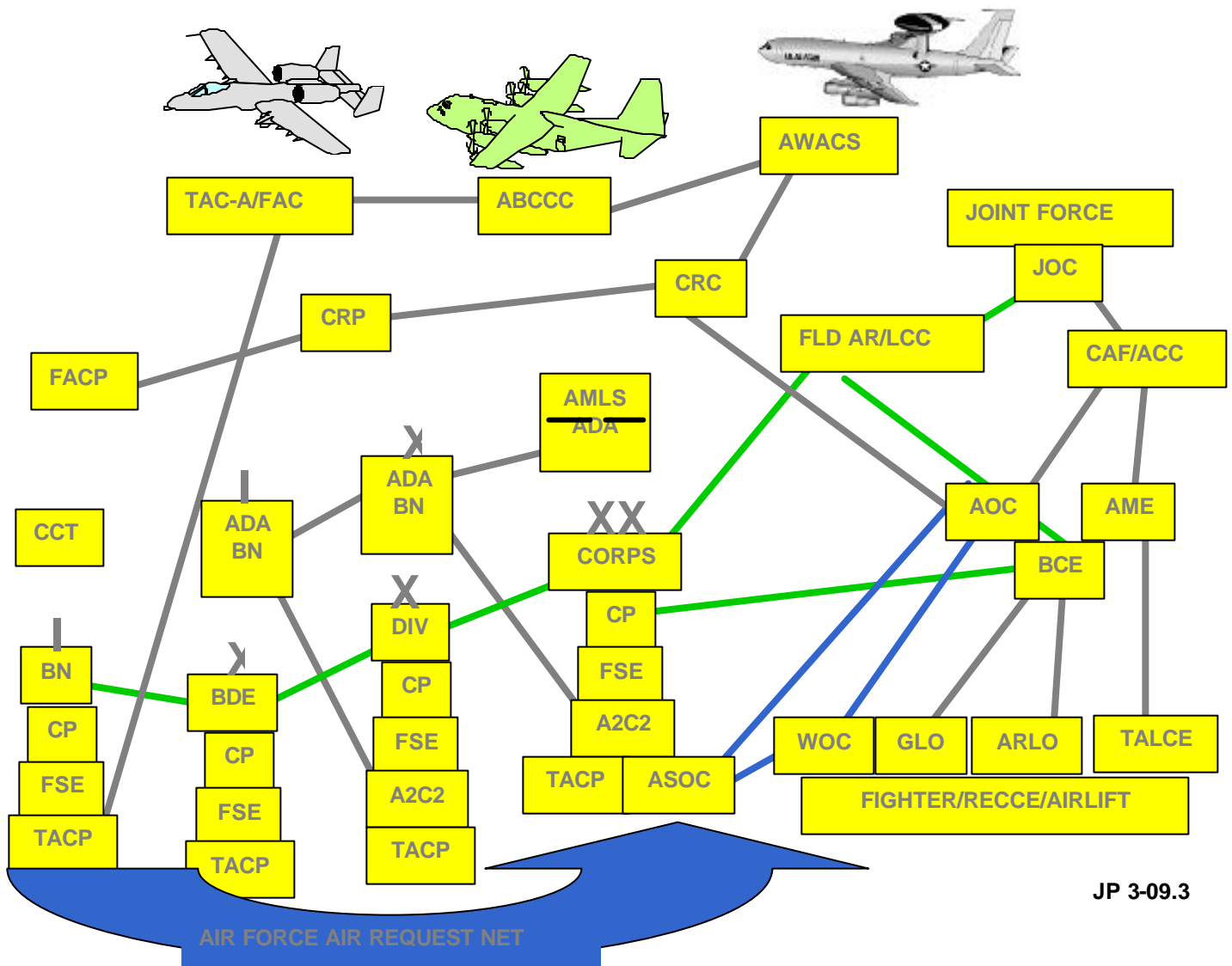
Immediate CAS

Immediate CAS consists of sorties which do not make the ATO/ITO. Immediate CAS requests usually result from unanticipated needs on the battlefield, often of an emergency nature. **Final approving/disapproving authority for immediate CAS requests is the ground commander through his staff!** (next slide)

Immediate CAS Flow

Immediate CAS should be requested by the ALO/FAC/TACP and transmitted to ASOC via radio using the Air Force Air Request Net (AFARN). The ASOC Fighter Duty Officer (FDO) copies request on DD Form 1772 and then coordinates with FSCORD, validating with Intel, deconflicting with other aircraft, and getting approval from corps G-3 Air for the request. The Corps G-3 Air (Representing the Army Command Structure) determines availability/suitability of Corps organic artillery and has final approval authority for the request.

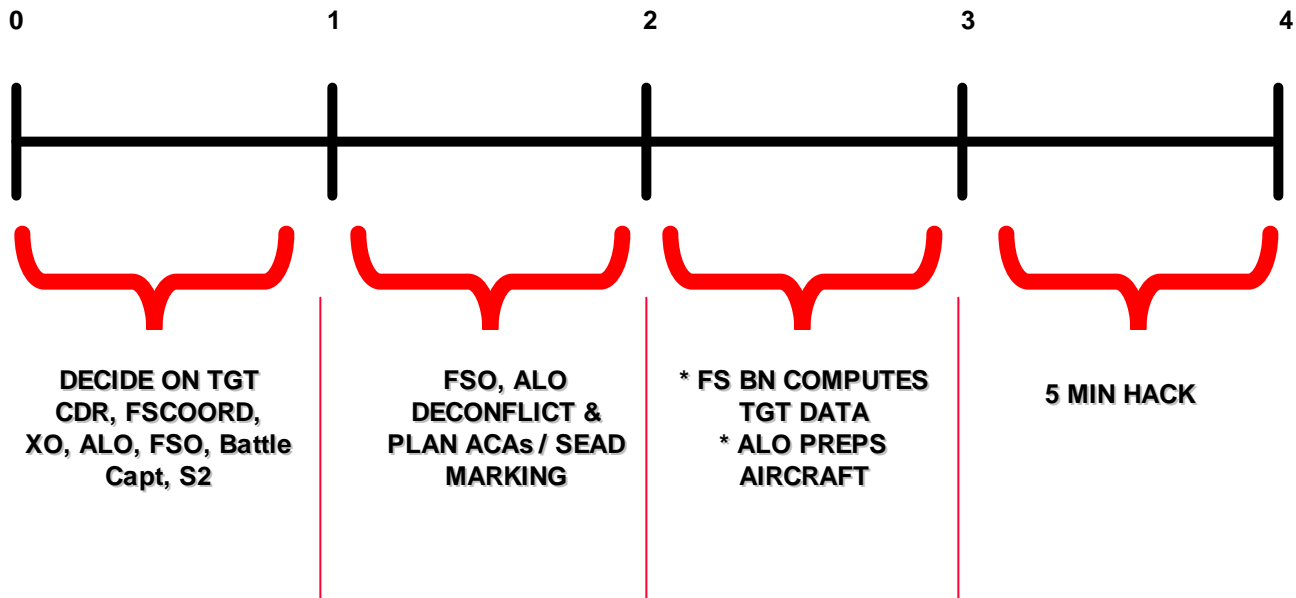
TAGS – Theater Air Ground System – (Slide 9)



Battle Rhythm for CAS – (Slides 10 – 11)

The first step during the CAS battle drill is to have a targeting cell huddle. The targeting cell consists of the XO, S2, FSO, ALO, and Battle Captain. These individuals will determine the best target for CAS. It is more efficient if the huddle happens prior to aircraft arrival. Once the target has been determined, the FSO and ALO must then plan and deconflict ACAs, SEAD, and marking rounds. During this time, the battle captain must call each unit in the BCT and receive a front line track or closest friendly to the target. The S2 must check UAV feeds and JSTAR readouts and give the ALO the latest of the enemy locations. Next, the ALO must brief the aircraft on the CAS plan while the FSO instructs the Fire Support Bn to compute the target data for marking rounds and SEAD. Finally, when all players are complete with their CAS planning, the ALO will initiate a 5-minute hack between the ALO, FSO, FS Bn, and aircraft. When the aircraft first contact the BDE TOC, ADA will be advised as to the route and location of the aircraft while on station (next slide).

An example battle rhythm for CAS is as follows:



1. Formal process on decision will reduce time - SOP.
2. Formal process on decision will reduce time - SOP.
3. Dedicated / planned SEAD Shooter - speeds processing.
4. Can not really reduce in a low air war environment or if using MLRS or other high altitude artillery.

Other considerations: Type Aircraft and Ordnance, target designation capability, C2 Assets, UAV feeds, JSTAR read

Airspace Coordination Area (ACA) – (Slides 12 - 14)

An ACA is a three-dimensional block of airspace in a target area, established by the appropriate ground commander, in which friendly aircraft are reasonably free from friendly surface fires. May be formal or informal. **Formal ACAs** are usually in effect longer than an informal ACA. **Informal ACAs** are most often used and are preferred due to flexibility during the dynamic flow of the battle. Usually an informal ACA is beneficial to both the ALO and artillery. Examples of using ACAs and maximizing the three dimensional space contained within the ACA, refer to slides 13 and 14.

CAS Characteristics – (Slides 15 – 17)

When applied in mass, CAS has immediate physical and psychological effects on the enemy. CAS provides the surface commander with **highly mobile, responsive, and concentrated firepower, enhances the element of surprise,** is capable of employing munitions with **great precision,** and is able to **attack targets** which are **inaccessible or invulnerable to surface fire.** It also offsets shortages of surface firepower during the critical landing stages of airborne, airmobile, and amphibious operations by friendly forces. Reliable air-to-ground communications are mandatory when operating in close proximity to friendly forces in order to prevent fratricide. Additionally, enlisted terminal attack controllers (ETACs) normally provide targeting instructions, final attack clearance, and fratricide avoidance instructions to CAS aircraft (can also be performed by airborne forward air controllers). Due to the high potential for fratricide during CAS operations, specific procedures and training are required for air and ground terminal attack controllers and CAS aircrew. CAS should be massed to apply concentrated firepower where it is most needed by the ground commander. Since available CAS assets are usually limited, firepower is best applied against:

- Targets of immediate concern to surface forces when those forces cannot produce the desired effect with organic weapons alone
- When surface forces are committed without normal organic weapons support
- When the disposition of targets prevents successful attack by surface firepower

CAS Control Measures – (Slides 18 – 19)

Positive Control - An attack controlled by a ground or air FAC either directly or indirectly (Preferred method)

Direct control: The controller can either see the aircraft and target, or can use other means to confirm the aircraft is attacking the correct target

Indirect control: variation of positive control where the controller cannot see the attacker or target, but a trained observer is in position to see both and has direct communications with the terminal controller

Reasonable assurance - used when no ground or air-based controller is in position to observe the target area. The primary factor is an acceptable separation between friendly and enemy ground troops that reduces the risk of fratricide. Only use reasonable assurance when circumstances **defined and published by the JFC have been met,** and the **air and ground component commanders concur** with its use.

Things that make controlling CAS safer:

- Air superiority: allows CAS missions to concentrate on the task
- **SEAD is perhaps the most important aspect of air superiority to the CAS pilot**
- CAS is highly demanding of aircrew situational awareness, and proper execution of the mission is not normally possible while searching for or reacting to enemy air/ground threats
- Indiscriminately pushing CAS missions beyond the range of organic firepower can be dangerous; such missions will out-range ground-based suppressing fire and may fly into a much higher threat arena.
- CAS packages do not have the threat suppression assets that exist in AI packages
- Target marking: can be accomplished through various means, including smoke rockets or artillery rounds, laser designation, IR designation, and flares

Conditions for Effective CAS – (Slides 20 – 21)

The following conditions for CAS, if met, can increase accuracy of CAS attacks and reduce the potential for fratricide through target misidentification:

- Accurate friendly locations
- Favorable weather: perhaps more important to effective CAS than other forms of air attack

Since identification of the target through visual or electro-optical means is usually required for target confirmation and fratricide avoidance, poor weather can often prevent CAS missions from attacking their target(s), or worse, attacking the wrong one. New weapons may allow CAS aircraft to hit stationary targets through the weather, but mission success under such circumstances is dependent on target coordinate accuracy that is difficult to achieve on the battlefield.

Conclusion – (Slide 22)

CAS request and CAS execution will vary depending on the unit and the battlefield conditions. This lesson provides the basic understanding for CAS request procedures, coordination considerations, and CAS control procedures in a Tactical Operations Center. MQS-1 through MQS-4 will help foster proficiency and reinforce the lessons learned during this lesson.